



# EUROPEAN POLICY BRIEF



LIVE LONGER, WORK LONGER?

MAY 2016

## INTRODUCTION

Population ageing, propelled by a continuous increase in old-age life expectancy and a persistent replacement level fertility, presents a challenge for many welfare states to keep up their welfare expenditure on pension, health care and all old-age services. Options for tackling this daunting challenge, such as increasing fertility and immigration levels, cutting benefits and growing public debts, present numerous obstacles. Therefore, recent discussions on potential solutions have increasingly focused on how to encourage workers to postpone retirement, in order to maintain the size of the labour force which is necessary to provide economic support for the ageing society. This policy brief presents recent trends in old-age labour supply, and addresses the issue of whether we work longer, as we live longer.

Europe has witnessed a reversal of old-age labour supply, from a trend towards early retirement to a steady increase in the average effective retirement age (OECD 2006, 2014). The mean retirement age across the EU-27 dropped by nearly seven years between 1970 and the late 1990s. This trend decline, however, was reversed at the turn of the millennium for most EU countries, which is seemingly promising news, as longer working lives are important for sustaining welfare systems in ageing societies. While these trends correspond to changes in average retirement age across the entire population, it remains unclear whether these changes are universal across different socio-economic and demographic groups.

## WHO WORKS LONGER? A FOCUS ON EDUCATION AND GENDER DIFFERENCES.

Based on retrospective life history data from **13 European countries** from the third wave of the harmonized SHARE survey we investigated the relationship between long-term life course factors and the age of retirement (Divényi and Kézdi 2015). We found that compared to the less educated (8 years of schooling or less), people with secondary education (9-12 years of schooling) retire earlier. People with tertiary education retire somewhat later than people with secondary education, but still substantially earlier than people with low levels of education. As a consequence, the less educated start working earlier and retire later, which is equivalent to a longer active age (although not necessarily active in the labour market). Since education

and life expectancies are known to be closely associated (people with higher education tend to live longer) the above finding also implies shorter retirement careers for the less educated. This is consistent with reports in the literature on a reverse redistribution: whereas most public pension systems contain a component of redistribution from high earners to low earners this is compensated or potentially even reversed by lower life expectancies of the latter group.

The SHARE data must be analysed for all countries together, and these results may very well hide country-specific differences in retirement patterns, and perhaps also in inequalities in years in the labour force. We therefore took advantage of two administrative data sources (from Sweden and Spain respectively) to gain country-specific insights.

In the **Swedish** administrative data set (Qi et al. 2015) we followed each individual over the period 1968–2011. We found that Swedish older workers were universally working longer during the recent decade. Despite differences in health, education, occupation and country of birth the increase in retirement age is similar. The Swedish case therefore implies that almost all individuals are able to work longer, even among those with low levels of education and skills, impaired health and foreign-born background (Qi 2016, Qi et al. 2016a). Contrary to the European-wide findings discussed above, higher education in Sweden leads to longer working lives. Taken together, the observed increase in age at retirement in all groups in Sweden shows that they are not only able but also willing to work longer, and that economic incentives in the pension system are working.

While working life has been extended for both men and women in Sweden during the recent decade, the underlying mechanism driving these changes appears different between the sexes. We compared retirement ages across the cohorts born 1937–1944, and our results suggest that the 1994 Swedish pension reform which phased in the Notional Defined Contribution (NDC) scheme explains most of the increase in men's average retirement age, but it accounts for much less of the increase in that of women (Qi et al. 2016b). This gender distinction raised the additional question of what drives the increase in women's retirement age. One explanation may be increasing average educational levels, since the highly educated retire later than the less educated in Sweden (cf. Figure 1). The 60+ population today is, on average, more educated than the same-aged cohort in previous decades. Particularly, about 15 percent of the population born in 1937 attained university education, and this number grew to 30 percent for those born in 1944 while the proportion completed primary education only declined. This cohort difference in educational composition accounts for about one-fourth of the increase in women's retirement age, while its impact on men was negligible (Qi et al. 2016a). Thus not only economic incentives, but also the rapid increase of educated women, are important for the increase in retirement age in Sweden.

In coherence with what occurred in Sweden, the observed average retirement ages in **Spain** for the period 1985–2015 indicate a general trend of extending working lives. Both men and women with secondary studies retire earlier than other education groups (in coherence with results obtained with SHARE). Those with university studies have a slightly higher average retirement age than those with primary or less education (63.8 to 63.6, for the total population).

However, a more detailed analysis of the retirement decision in Spain draws a more complex scenario. When looking at the time elapsed since the person is eligible for retirement—instead of retirement ages—it can be said that those with higher education tend to remain less time in the labour market after they are formally eligible for retirement, as seen in Figure 2. A plausible explanation of these trends is that less educated people usually begin working at younger ages and therefore reach the minimum years of contribution required for retirement (15 to 20, depending on year of retirement) earlier as well. Nevertheless, the impact of low wages or periods of unemployment and non-participation (affecting more those less educated) may reduce their entry pension level, effectively forcing them to work more years to achieve financial security. This explanation is strongly coherent with the dramatic increases in waiting times of less educated persons during the economic crisis, with a more moderated increase in the case of better educated ones.

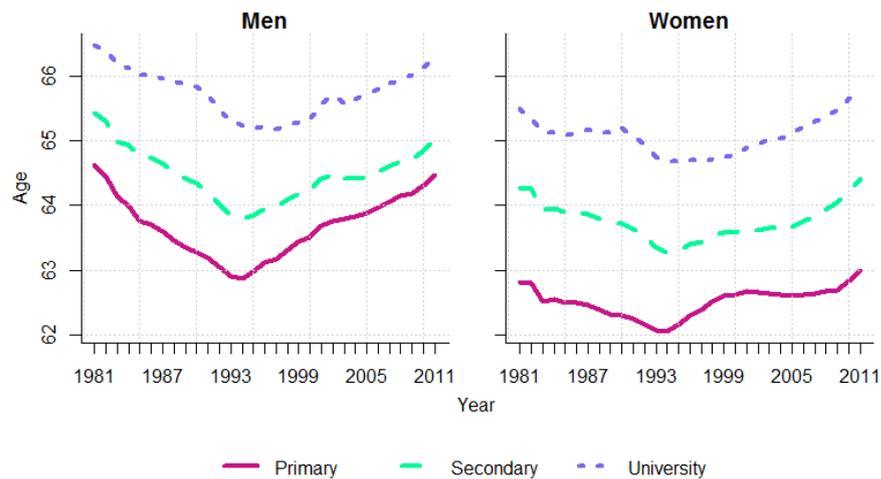
On the other hand, administrative panel data (Patxot et al. 2015) were available for the period 2005–2010 to estimate a retirement decision model that includes incentives, personal characteristics and work trajectories. There we found that having a university degree has a significant impact on increasing men's probabilities of retirement. For women, the effect of education on retirement decision is not significant. Both men and women tend to retire during

the first year when eligible, though the effect of this condition is smaller in the case of women. The effect of the replacement rate for women is two times that observed for men, meaning that the monetary value of the pension amount (related to the wage received if remaining in the labour market) is more important for women than for men. This can be explained by the fact that on average, working careers of women are considerably shorter and wages are lower compared to those for men.

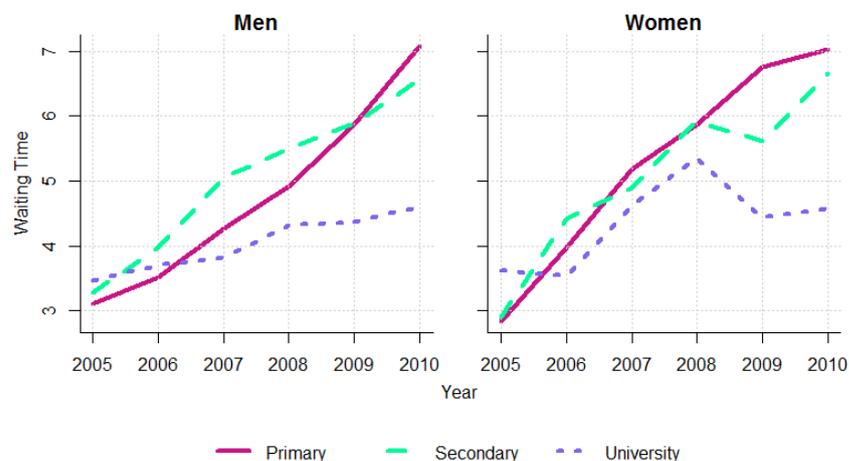
The results from both Sweden and Spain indicate that economic incentives are very important in the retirement decision across pension systems. The differences found in retirement age by educational level between Sweden and Spain may indicate underlying inequalities which deserve closer attention.

The situation in Sweden conforms more closely to expectations in a system where economic constraints are not a determining factor in the retirement decision. The fact that the less educated work longest in Spain, despite having employment which is more physically demanding, indicates a situation where pension amounts are not considered high enough to allow for retirement at the desired age. This implies that the least educated Europeans in some national systems find themselves forced to work the longest, with the lowest pay and the worst living conditions, thereby accentuating the economic marginalisation of their working lives.

**Figure 1: Average retirement age in Sweden, by gender, education and year**



**Figure 2: Average waiting time (in months) from eligibility until retirement in Spain, by gender, education and year**



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## POLICY IMPLICATIONS AND RECOMMENDATIONS

The trend reversal in average retirement age is widely believed to be a consequence of many governments' interventions to increase statutory retirement ages and/or impose benefit reductions for early retirement. However, the AGENTA team at Lund University examined the causal effects of pension reform on retirement behaviour, and found that the increased retirement age might not be fully driven by the changes to pension systems. Similar results are found in Spain. Despite the 2011 reform introducing a compulsory delay of retirement age, the effective delay of retirement age can be largely associated to the effects of the crisis.

Our studies provide a number of promising prospects in terms of the future labour supply. First, impaired health does not prevent people from working longer, as the average retirement age of those unhealthy has been increasing to the same extent as that of healthy workers during the recent decade. Second, the younger cohorts will be increasingly faced with more pension reduction if they retire early, and therefore have stronger incentives to work longer. Third, we have seen an astonishing improvement in the average level of education of younger cohorts. If this human capital development continues, and given that the more highly educated persistently retire later than the less educated, we may expect to see a growing number of individuals continue to work after age 65. All this implies that the aggregate trend towards working longer is likely to continue. However, this outlook may not necessarily be the case for many other European countries. The Hungarian and Spanish team in the AGENTA project both found a negative relationship between education and the retirement rate, based on SHARE and Spanish administrative data, respectively. This implies that there are capacities of older workers with high levels of education and occupation remaining unused. Such an unused capacity shall bring us to the discussion of how to encourage the highly educated to work more years. A more troubling implication is that the most vulnerable workers in many countries—those with low education levels—may very well be the ones finding themselves forced to work longer due to the structure of pension systems not providing them with the resources needed to retire.

## PROJECT IDENTITY

<b>PROJECT NAME</b>	Ageing Europe: An application of national transfer accounts (NTA) for explaining and projecting trends in public finances (AGENTA)
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<b>CONSORTIUM</b>	Ecole d'Economie de Paris Paris, France  Hungarian Demographic Research Institute Budapest, Hungary  Lunds Universitet, Centre for Economic Demography Lund, Sweden  National Institute of Economic and Social Research LBG London, United Kingdom  Stiftelsen Institutet för Framtidsstudier Stockholm, Sweden  Szkoła Główna Handlowa w Warszawie Warsaw, Poland  Universitat de Barcelona Barcelona, Spain  Univerza v Ljubljani Ljubljana, Slovenia  Vienna Institute of Demography of the Austrian Academy of Sciences Vienna, Austria
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